

IMPLEMENTING GREEN HUMAN RESOURCE MANAGEMENT:

COST-EFFECTIVE STRATEGIES AND TOOLS

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ABSTRACT

All over the world, there has been a significant concern among business leaders to adopt green strategies to reinforce sustainable practices and increase employee's commitment to the issue of environmental sustainability. As a result, the modern HR managers have been assigned with the responsibility of incorporating the green HR policies in the organizations along with the responsibility of playing a vital role in implementing the overall environmental strategy of the organizations. As a result, HR managers are in the search of various tools and technologies which will help them implement the environmental strategies and sustainability. This paper aims at suggesting some cost-effective tools and techniques for HR managers in implementing green HRM and sustainability. Through an extensive review of the literature on green HRM practices and collecting primary data using observational and experimental techniques, this paper proposes the tools and techniques which can be used in any organization without any major change in the existing infrastructure. Besides, various benefits of implementing green HRM, both monetary and non-monetary benefits, have been pointed out. Finally, the paper suggests some pragmatic initiatives for HR managers for going green in HR function and making the organization green as a whole.

KEYWORDS: Green Human Resource Management, Environmental Sustainability, Green HR Initiative, Conservation Of Natural Resources, Green Building & Paperless Office

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1. INTRODUCTION

Now there has been a growing interest in the environmental issues all over the world and all most every sphere of life irrespective to politics, public or business. Some specific treaties like Vienna Convention 1985, Kyoto 1997, Montreal 1987, Copenhagen 2009 etc. have been signed by the world leaders to combat with the climate change. (Victor, 2001). Countries of the world are now seriously concern about the sever harmful consequences of the environment pollution from various chemical and industrial waste material. Hence the governments and NGOs are now formulating and promoting policies and regulations to abate and to some extent stop the destruction of natural resources so that they can minimize the negative effect of environment pollution on society and on the mankind as a whole. (Christman & Taylor, 2002; Shrivastava, 2010)

In the above circumstances, organizations have to operate their activities in such a way which will be environment friendly and at the same time it will ensure the organizations' profitability. So, along with the economic and financial factors, organization must also consider the social and cultural factors in order to be successful in corporate community (Daily, Bishop, & Steiner, 2007; Govindarajulu & Daily, 2004). To implement

this sustainable corporate strategies, organization need strong leadership and a well-planned process (Glavas, Senge, & Co-operrider, 2010). Corporate leaders are increasingly prioritizing this sustainability issues as they are being aware and sometimes being pressurized by government policies to incorporate the “green” into the corporate strategy. But still most of the practitioners in the HR field are not comfortable with the concept of “green” (Wirtenberg, Harmon, Russell, & Fairfield, 2007) and specially in the developing countries like ours.

For implementing any corporate environmental policy, a collaborative effort of all the units of an organization including Marketing, Finance, IT, HR, etc. is required. But undoubtedly HR has a more vibrant role to play in implementing such policy than other units of the organization. We must acknowledge that corporate world is a major player in implementing any national or international environmental program. So, corporate world must try for finding out the solution of the environmental hazard caused by various environmental pollutions from mills, factories, corporate offices etc. In the last few decades, a global consent has emerged about the need for environmental management. A significant portion of the workforce is now aware of the environmental preservation and green concept. They are more satisfied and committed with the organizations which are proactive in endorsing “green” (González-Benito & González-Benito, 2006).

Constructing this green concept, numerous literatures on Green marketing (Peattie, 1992), Green accounting (Bebbington, 2001; Owen, 1992), Green retailing (Kee-hung, Cheng, & Tang, 2010), and Green management in general (McDonagh & Prothero, 1997) have enriched the field of management. Besides, the involvement of corporate sector in adopting and implementing the environment management strategies has made the way for green management (Boiral, 2002; González-Benito & González-Benito, 2006).

Human Resource Management (HRM) deals with the most important element of the organization that is human resources. It is high time to consider the whole context of HRM from the perspective of sustainability. From this point of view, Green Human Resource Management (GHRM) is the most important element of organizational sustainability. Experts defines the term ‘Green HRM’ in many ways but all these definitions emphasize the sustainability in using organizational resources. Mampra (2013) describes Green HRM as the use of HRM policies to promote the sustainable use of organizational resources and promote the grounds of environmentalism which further enhance the employee morale and satisfaction. Others define Green HRM as formulating and practicing the HR policies and philosophies in such a way which will promote a concern for environment among the employees and which will ensure the sustainable use the organizational recourses such as electricity, paper, oils, water, etc. (Zoogah, 2011). Green HRM will make sure that organization is causing no harm while performing business or at least causing minimum harm to the environment where there is no alternative to doing so. Green HRM will make employees and management understand not to disturb the natural harmony for any short term gain. Experts also suggest to endorse and enhance the corporate social responsibility of the organizations to compensate the society for polluting the natural resources like air, water, etc. that belongs to all. So Green HRM has dual role to play. At lower level Green HRM deals with employees to be sustainable in their personal day to day life while using organizational resources and at higher level Green HRM encourage the policy makers and stakeholders of the organizations to formulate environment friendly regulations and policies (Mandip, 2012). That’s why, we strongly argue that without facilitating the Green HRM and implementing sustainable policies, going and being green will be very difficult.

Although a number of papers have been written on green HRM, there is still ambiguity regarding the implementation of green HRM at employee level and at policy making level. But there are very few studies demonstrating the effectiveness of Green HRM practices outside developed countries. Our literature searches have revealed that to date, little research has been done on Green HRM practices in developing countries in general, and none on this particular topic. This article figures out how organizations can formulate green policies and implement them and this article also provides a specific future direction of green HRM for the developing countries like ours where top level management of the organizations are still reluctant to implement green strategy because of the associated cost. So, it has been imperative to develop such green strategies which will be compatible for the organizations to implement those green strategies at a minimum cost.

2. OBJECTIVES

The purpose of this study is to

- Provide with a basic understanding of green HRM to the readers,
- Provide guideline and direction for implementing Green HRM and creating green workplace at a minimum cost.
- Highlight the existing views on green HRM by other experts,
- Provide some suggestions regarding green initiatives for HR.

3. METHODOLOGY

The study is primarily based upon the secondary data although primary data has been collected using observation method.

The primary data has been used to examine various existing tools and technologies used in a typical organization. We collect out primary data from an organization comprising of 213 employees in a 10 storied building. The organization does not have green strategies and the organization is not using green technologies. We have collected data from this organization and compare them with the existing literature to find out the benefits the organization might have achieved by using low cost green technologies which do not even require much changes of the existing set up of the building.

For the secondary data, literature related to the topic from different databases, websites and other available sources were collected. A systematic review of collected literature was done in detail.

4. LITERATURE REVIEW

Recently, an increasing awareness has been observed within the business community on the significance of going green and adopting various environment management techniques. As the corporate world is going global, business is experiencing a shift from traditional financial structure to a modern capacity based institution which is ready to explore green economic facets of business. Today Green Human Resource Management (GHRM) has become a key business strategy for the organizations where Human Resource Management (HRM) Departments play an active role in going green at the office.

The literature on sustainability in the HR field reveals that HR professional and executives are very keen to adopt the green HRM to make their organizations exclusively environmental champions. Research also highlights a positive correlation between various environment management practices and performance of the organizations using different

parameters (Iraldo, Testa, & Frey, 2009; Yang, Lin, Chan, & Sheu, 2010). Literature has given significant importance on the adoption of the green HRM arguing that the organizations may obtain more profit by endorsing green HRM than before (Murari & Bhandari, 2011). It is evident that HR Department plays an important role in building a sustainable culture in the organizations. If we strengthen the green human resource policies, the adoption of environment management system (EMS) and policies by the organizations will be more intense. A number of modern scholars have worked and augmented the concept of Green HRM in the last few years (Berrone & Gomez-Mejia, 2009; Jabbour, Santos, & Nagano, 2010; Massoud, Daily, & Bishop, 2008; Renwick, 2008; Stringer, 2009)

The inclusion of environmental objectives and strategies in the strategic goals helps an organization in reaching at an effectual Environment Management System (Haden et al., 2009). If an organization incorporates various environmental rules and policies in its recruitment and selection, training and development, performance appraisal, and reward system, it will be successfully able to align the employees with its environmental strategies (Wehrmeyer, 1996). It is also argued that incorporation of various environmental policies alone is not enough for implementing green strategies. Scholars suggest that to implement green strategies, a great deal of skills both technical and managerial is required among all level of employees. Hart (1997), Lin, Jones & Haieh (2001) suggest that along with the skills and awareness among the employees, development of innovative tools which will ensure sustainable use of the resources, is equally important. So organization should use such equipment and tools which will ease for the employees to comply with the environmental rules and policies.

5. GREEN HRM FUNCTIONS FUTURE DIRECTION

It needs to be acknowledged that the intersection of sustainability, the natural environment, and HRM are very important aspects which need to be combined for the implementation of the green concept.

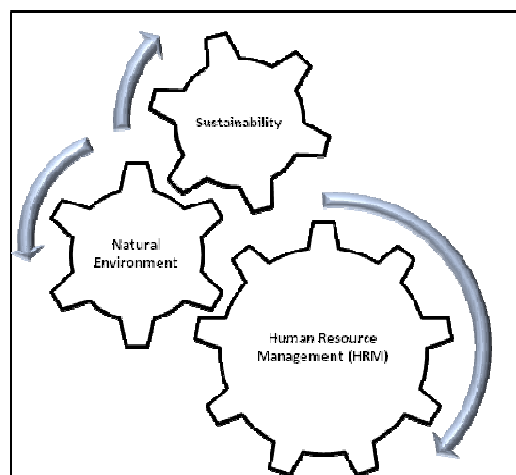


Figure 1: Link between Green HRM and Sustainability

It has been pointed out by many HR professionals that systems need to be aligned with each other in order to increase the likelihood that the organization will achieve its green strategy. It has been identified by many studies that recruitment, training, employee motivation, and rewards are important human dimensions which contribute to the movement in employee implementation of green management principles (Callenbach et al., 1993; Ramus & Steger, 2001; Ramus, 2002; Govindarajulu & Daily, 2004.). In order to make sure that the organization gets right employee green inputs and right employee green performance of job, it is indispensable that HRM functions are adapted or modified to be green.

GHRM is a process of creating green workforce which will understand and appreciate the green culture in the organization. The primary aim of such green culture in HRM is to ensure environmental friendliness throughout the whole HRM process (Dutta, 2012). The Human Resource Department of an organization can play a significant role in establishing the green culture through the process of recruitment, selection, training and development, compensation etc. (Harmon et al, 2010). HR is most instrumental element in transforming green policy into practice (Renwick, 2008). The selection process, intensive compensation, performance appraisal system, employee relation and training have been identified as the epicenter for organizational success by Huselid (1995). Subsequently, the argument is advanced that the HR functions carry paramount importance in realizing organizational change of adapting the new requirements for organizations and so it is a vital strategic issue.

Sustainability, natural environment, and HR management are the areas which must be aligned with one another in order to achieve the green strategy (Ulrich, Brockbank, and Johnson, 2009). Cherian and Jacob (2012) have identified that recruitment, training, employee motivation, and rewards are vital HRM magnitudes which pay significant role in implementation of green strategies. With a view to making sure that the organization has the green inputs (the right employee) and the green outputs (performance of job), it is indispensable that HRM functions are modified to be green (Opatha & Arulrajah, 2014).

Now, we briefly describe some of the important functions of HRM from two distinct but interrelated perspectives on the ground of green and sustainable HR management.

5.1 Green Recruitment

Attracting the qualified people for the job is a big challenge for the organization in this “war for talent”. Creating reputation as green employer can be an effective way to attract the new talent. Wehrmeyer (1996) has found that graduates are now considering the reputation and environmental performance of a firm while making the decision of applying for the job. A survey conducted by the British Carbon Trust on 1,018 employees reveal that 75% employees think that it is important for an organization to have an active policy to reduce carbon emissions (Clarke, 2006). So, it can be easily deduced that becoming a green employer will surely improve the brand image of the organization to the employees and it can be an effective tool for attracting qualified employees.

Now we focus on how a firm can incorporate its green strategies in the recruitment process at personal/employee level. Wehrmeyer (1996) defines green recruitment as “*the practices of making sure that new entrants are familiar with an organization’s environmental culture and are capable of maintaining its environmental values.*” Phillips (2007) and Stringer (2009) suggest that organization need to incorporate green job description and green job specification which will ensure that the new entrants have the skills and attitude to comply with the green strategies of the organization. The new entrants must have ability of recycling and attitude of conservation of resources such as water, electricity, paper, etc.

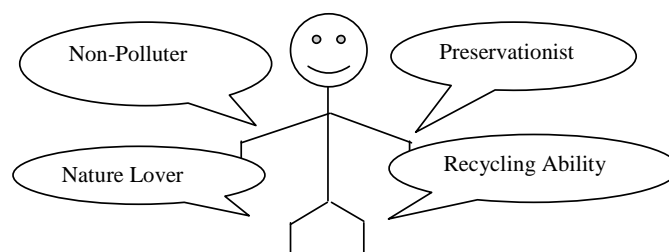


Figure 2: Characteristics of Green Employee

On the other hand, we must also think about the green recruitment at organizational level. At organizational/administrative level, organization should try to make the recruitment process itself a green process. Here, we must ensure that the very process itself or all the activities done in the recruitment process must comply with over all green strategies of the organization. For example, organization may use - 'Online recruitment', paperless interview, Human Resource Information System (HIRS), etc. in their recruitment portfolio, instead of using traditional paper work. Online recruitment is the use of technology or the web based tools to assist the recruitment process. These tools can be a jobsite, web portal or a website, for example - www.monster.com, www.bdjjobs.com, www.prothom-alojobs.com, etc. or the organization's corporate web site. Human Resource Information System (HIRS) is a computer based information system which contains all HR related data in a systematic way for decision making that reduces a lot of hazard of maintaining paper files. Thus, the very process of recruitment can be a green function.

5.2 Green Training and Development

Although we frequently use 'Training and Development' interchangeably, these two terms slightly vary from each other in HRM. Training means giving new or current employees the skills they need to perform their job. On the other hand, development is an educational process which is concerned with the overall growth of the employees to prepare the employees for future challenges. Thus, green training and development (T&D) is the process of providing the employees with adequate knowledge, skills and attitude so that they can comply with the green strategies. The primary goal of green training is to develop the skills of conservation of resources, recycling and develop an attitude of being environment friendly. Whenever any green technology is installed, green training makes the employees accounted with the technologies so that employees get it easy to use the technology and organization gets maximum benefits from it. So, green training is conducted on working methods that conserve energy, reduce waste and engage employees in environmental problem-solving. Green T&D also raise awareness among the employees regarding different aspects and value of environment management.

5.3 Green Performance Management

Performance Management (PM) is the process of providing feedback, accountability and documentation of the performance of the employees in a systematic manner that prompts the employees to enhance their performance and channels their talent toward achieving the organizational goals in a better way. The cognition of the corporate strategy culminates into the performance management of an organization. Environment Management (EM) influences the global business strategies and thus performance management is also being influenced by the green wave in a positive manner. Marcus & Fremeth, (2009) noted that now-a-days some firms are applying Green Performance Management (GPM) by installing corporate wide environmental performance standard which encourage the employees to comply with the green strategies of the organizations. When green standards are set and employees are appraised against these standards, it creates a positive urge among them to follow the green rules and regulations.

Many firms, now-a-days, are dealing with the issue of PM by applying corporate-wide environmental performance standards and green information systems or green audits to obtain suitable data on environmental performance (Marcus & Fremeth, 2009). The most important part of performance management is performance appraisal. Performance appraisal is such a powerful tool of HRM that through this tool we can contribute most to implementation of green strategies (Jackson et al., 2011, p. 7). Performance appraisal system determines the issues or aspects of employees' job that are valued most. According to the performance appraisal criteria, employees mold their attitude and performance. Vroom

Expectancy theory (Vroom et al., 1964) suggests that employees will be motivated to perform any task or obey any rules if outcomes of performing the task or obeying the rules satisfy their need by providing some monetary or non-monetary rewards which will be given through a fair performance appraisal. So, incorporating various environmental performance criteria in the performance appraisal system will motivate the employees to comply with the green rules and regulations of the organization. Thus, in addition to meeting the criteria of reliability, validity, and fairness, effective performance appraisals provide valuable feedback to employees and support continuous improvements in the organization's environmental outcomes (Jackson et al., 2011). HR managers should amend by including dimensions for appraising people on the following skills such as- innovation, diversity, teamwork, collaboration, recycling and performing environmental responsibilities. Such competencies will surely strengthen the organization's core values (Liebowitz, 2010). Managers should also inform the performance criteria and the ongoing performance status of the employees all-round the year, so that the employees can enhance their performance on various environmental dimensions.

We can depict the scenario of green HR functions in the table below.

Table 1: Matrix of Green HRM Functions

	HR Functions (Doing Green)	HR Functions (Making Green)
Recruitment and Selection	<ul style="list-style-type: none"> ➤ Online recruitment ➤ Virtual Interview ➤ Being environment friendly while conducting selection process such as using minimum electricity, water and other resources. 	<ul style="list-style-type: none"> ➤ Incorporating green job description and job specification.
Training and Development	<ul style="list-style-type: none"> ➤ Online training ➤ Virtual Conference ➤ Using digital material in training instead of paper 	<ul style="list-style-type: none"> ➤ Organizing seminar and conference on environmental issues. ➤ Training employee about recycling, energy and water conservation etc.
Performance Appraisal	<ul style="list-style-type: none"> ➤ Restricting the use of paper in performance appraisal. ➤ Computer base performance management system. 	<ul style="list-style-type: none"> ➤ Setting green standards and appraise employees against them. ➤ Green audit. ➤ Linking green performance appraisal with reward in positively correlated manner.

6. GREEN INITIATIVES FOR HR

6.1 Green Building

Until 2000, the concept of green building was considered as thought-provoking experiments but unfeasible projects in the real corporate world. However, after 2000, several dynamics have triggered a major shift in this thinking.

First of all, designing realistic and reliable building-rating and performance measurement systems for both new building constructions and renovation of existing buildings such as Leadership in Energy and Environmental Design (LEED) rating program by United States Green Building Council (USGBC), Building Research Establishment's Environmental Assessment Method (BREEAM) by UK and Green Star (GS) by Australia etc. has eased the process of constructing green buildings. Certainly, firms can construct green building without following these rating programs but accreditation assures prospective buyers and related stakeholders that a building is truly sustainable. For example, LEED evaluates any building in six areas and awards -

- Certified
- Silver
- Gold and
- Platinum levels.

Secondly, a number of studies all over the world have supported the financial benefits of going green. Initial investment in adopting green technologies may sometimes cost a little bit higher than that of traditional building but over the long time horizon, it proves greater financial benefits by reducing utility costs and enhancing employee performance. For example, Genzyme Corporation's 12-story LEED-Platinum headquarters in Massachusetts experienced 42% less energy and 34% less water consumption than standard buildings of similar size (Dara Olmstead and Dona Neely, 2005). Besides, green building increases the employee productivity by decreasing the employee sick time and by improving their moral and job satisfaction. 58% of 920 of Genzyme Corporation report that they are more productivity than they were in their former headquarter building. Moreover, employees sick time is 5% lower than for all of Genzyme's other Massachusetts facilities combined because alternative building materials used in green building don't emit toxins, like formaldehyde, that are commonly found in standard building materials and workplaces.

6.1.1 Alternative Building Materials

The building materials that we use to construct building has a noteworthy impact on the health and performance of the employee working there. Various toxic building materials used in building construction may significantly causes various sick building syndrome (SBS) symptoms and thus reduce employees' performance. A study conducted in 2002 by the Indoor Environment Department at the Lawrence Berkeley National Laboratory in California reported that approximately 23% of U.S. office employees or workers experience more than two sick building syndrome (SBS) symptoms—such as dizziness, nausea, and acute eye, nose, and throat irritation—in their workplaces annually. By using green building materials, a healthier and safer working place for employees can be ensured. The same study recommended that if the improved air quality can be ensured by using of green building materials, green design, and green technologies throughout the building, SBS symptoms can be lowered by 20% to 50%, colds and influenza can be reduced by 9% to 20% and, allergies and asthma can be abated by 8% to 25%.

A plethora of sustainable, nontoxic building materials are now readily available at reasonable prices. These include low- and zero-VOC paints, strawboard made from wheat (rather than formaldehyde-laced particle board), and linoleum flooring made from jute and linseed oil (rather than standard vinyl, which is packed with toxins). Materials like 100% recycled carpeting and heavy steel, acoustic ceiling tiles and furniture with significant recycled content, and soybean-based insulation often cost the same as or less than standard materials, and they have much less negative impact on the environment.

6.1.2 Construct Green

How a building is built, is just as important as where and what it is built. Ensuring a superior indoor air quality, for example, starts during the construction process. Recycling construction waste is vital part of green building construction and it offers several benefits. Firstly, it avoids landfill and thus save the environment. Secondly, the cost of landfill is much higher than that of recycling. Finally, a company can save hundreds of thousands of dollars by crushing the

concrete from a demolished facility and using it as structural fill for a new building on that site because it doesn't require moving that waste off-site and purchase grit for structural fill. If any firm recycles at least 50% of its construction debris, LEED gives points to that project. Many companies do more. The Genzyme Center contractor, for example, recycled over 90% of the project's construction waste.

6.2 Conservation of Energy by Using Green Technology

Green building technologies conserve and generate energy. Companies can, for example, install motion-sensitive lighting sensors in offices and at workstations. We can also use highly efficient HVAC systems that do not use chlorofluorocarbon, hydro-chlorofluorocarbon, or halon-based refrigerants which diminish the ozone and require more energy than green refrigerants which are chlorine free, for example. Although such technology cost more than standard building systems, companies can still take the advantage of saving energy over long run.

Advanced energy-conserving systems and many other green features took up almost \$23 million (16%) of Genzyme Center's \$140 million budget. Genzyme, however, expects the building's green components to generate a return on investment in ten years, in part through lower operating costs but primarily through increased productivity, longer employee retention, and less sick time.

Green facilities can also generate some of their own electricity with alternative technologies such as solar system, wind turbine, etc. For example, Wal-Mart Super center in Aurora, Colorado, has a 50-kilowatt wind turbine systems attached to the rooftop clerestories.


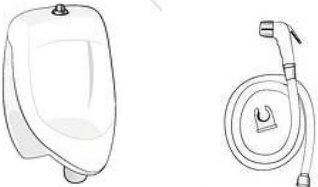
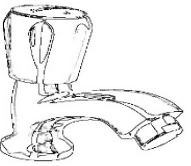




Moreover, training of employees on conservation of energy may play a significant role. For example, HRM department may train the employees to develop the habit of switching off the fans, Air Conditioners (AC), lights, personal computers (PC) and other electronic devices while leaving the room for more than 5 minutes. Employees may be encouraged to use sun light and natural air flow whenever available. However, the technology used in the workplace must support such habit of the employees. The types of technologies should be used that will ease to follow energy conservation rules for the employees. For example, placing the switches on such a place that will allow the employees to switch on and switch off their electronic devices very easily. PCs may be scheduled as such that they will automatically go to *sleep mode* after two minutes while they are not being used. Moreover, employees may be encouraged to use public transport by give an extra credit in the performance appraisal for those employees who use share cars or use public transports.

Energy saving equipment and machine should be used such as LED lights, room cards, etc. For example, many hotels are now designing their rooms with a special type of energy-saving-card. When the customer enters the room by punching the card, only then the room is provided with electricity, water and all other supplies. In many hotels in the world, now it is common to find this type of energy-saving technology. In this case, customers are to insert their hotel room-key card in the wall slot upon entering the room and the lights turn on. Customers are to remove the room-key, while departing the room and the lights automatically go off. Thus, this innovative technology has been not only allowing the hotel business to be environment friendly by reducing the misuse of natural resources but also reducing the utility cost of the business. These types of initiatives may save a notable amount of electricity in the workplace and thus save a huge amount of money.

6.3 Save and Manage Water

As water becomes scarcer and more expensive in many parts of the world, firms need to focus on conservation. People of many parts of the world are now severely suffering from scarcity of pure drinking water and various water contaminated diseases are spreading all over the world specially in the third world countries of Asia and Africa. Water is being contaminated due to untreated toxic chemicals from mills and factories, human waste and various water vehicles. On the other hand, people are recklessly wasting water whereas a little bit consciousness among the people and the use of green technology can save huge amount of water every day.

Table 2: Cost Effective Tools for Water Conservation

	Column-1	Column-2	Column-3
Row 1	Urinals		
Row 2	Water Tab	 	 
Row 3			 Motion Sensor →

We conducted a survey in an office of 213 employees (83% employees were male who are able to use the sanitary ware items of Row-1 for urinals). As per our observation simple change in the sanitary ware items may save approximately 50% water uses in the office. If the sanitary ware items of Column-2 are changed to Column-3 for urinals and basin, approximately 40%-50% water consumption may be reduced.

In the survey, it has been noticed that on an average a men employee uses urinals at least 3 times a day during the office time and after using the traditional urinals (Row-1: Coloum-2), he flushes which require much more water than it is necessary to clean the urinals. Instead, if he uses water conservational urinals (Row-1: Coloum-3), almost 50% water can

be saved in each flush.

Another sanitary item may save huge water that is water tab. In our survey, it has been noticed that most of the people keep the water tab open while using it for washing hands, brushing the teeth, shaving, cleaning face and so on. Most of the people do so because they dislike twisting the water tab, although it is not a tiresome job but boring of course. This disliking of twisting the tab every time for opening and shutting down encourages employees to keep the tab open for a time ranging from 30 seconds to 3 minutes while one-third of the water fallen from the tab during this time is used by the user and rest of the water is wasted. But if we replace the traditional water tab (Row-2: Coloum-2) with water conservational one (Row-2: Coloum-3), as much as 30% water used through water tab can be saved. In the water conservational tab (Row-2: Coloum-3) employees are to push the tab up to open water flow and to push the tab down to shut it. Besides, on the basis of use if we separate toilet and urinal, and limit the water per flush in the urinal, we can save a huge amount of water even in the existing set up (Row-1: Coloum-3). Moreover, we may also use motion sensor and touchless water tab which is capable of detective the presence of our hands and supply water accordingly. Thus this automatic water tab may save huge amount of water.

We may also use waterless urinals (which are more sanitary than standard ones) and water recycling plant although the technologies are still not viable in developing countries for the associated cost and technical expertise.

6.4 Paperless Office

With the advances of Information Technology (IT), the consumption of paper has fallen dramatically. All the documents are now saved in computer based virtual storage. Thus the cost of printing, copying and storing etc. has been curtailed. Moreover, computer based information system save a lot of time used for searching paper documents. With invention of huge electronic storage (Giga byte, Tera byte etc.) and cloud storage system at relatively low cost, the task of taking back-up of the document for safety and distributing the documents among a large number of people has been very facile.

The aim of green HRM is to make an office totally paperless although it is a long term process. In 2008, for example, Jamie Garratt established Idea Rebel which is a Vancouver-based digital agency and it is a complete paperless office (Borzykowski, 2013). In this agency, all the documents are emailed to employees and employees uses their tabs to take notes. Employees also use whiteboards for temporary writing and drawing.

Moreover, there are plethora of mobile and computer based applications to manage and store documents in a cloud computing system. One of the most significant advantages of these apps is that employees can access the data from anywhere and anytime just by logging in their cloud accounts. These apps automatically organize the documents on topic basis and date basis, for that it is easy to find the documents. Many of these apps are free. Anyone can download them in their smart phone and use them.

7. CONCLUSIONS

Now the business organizations are in continuously pursuing to incorporate 'the green' concept in their corporate strategy. Business organizations want to incorporate the green concept both for complying various international treaties and for reducing cost. Human resource carries paramount importance in this respect. As a result, HR department has an additional responsibility of incorporating green HR philosophy with the corporate strategy as well as with HR policies. Implementation of Green HR yields increased productivity, cost efficiency and employee retention. Although the concept

of green HRM is still in incubation stage, the awareness regarding the green concept is rising all over the globe that has compelled the corporate world to incorporate green HR philosophy with special focus on waste management, recycling, reducing the carbon footprint, and using and producing green products. Now HR managers should create awareness among the employees regarding green movement, utilization of natural resources and retaining the natural resources. To do so, HR department needs tools for making the HR function green as well as making the work environment green. This paper aims at suggesting some low cost tools which will help the HR manager to implement the green strategies. Further research will unfold more tools and their applicability along with the cost benefit analysis of each tools.

Green HRM can significantly contribute the organization to reduce environment pollution and to create a healthy working environment both physically and financially. But the implementation of green strategies requires the willingness of the top level authority and a legal framework from the part of the government.

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